# Winterization Procedure Must be Completed by a Licensed Plumber

Failure to properly winterize unit can result in thousands of dollars in damage.

# 60' x 11' Office with S/C Washroom Trailer

## **General Information**

The 60' x 11' office with s/c washroom trailer is designed to be used in various applications. It can be used as an open office or have multiple offices with a self-contained washroom. Meaning that the 400 gal water tank would need to be filled by a water truck and have the 400 gal sewer tank pumped out by septic truck. Alternatively, the trailer can be hooked up with municipal services or an on-site water source and septic tank/field.

The washroom is equipped with a macerating toilet and one ½ HP water pump. Please note there is a water pump power supply control box on the back wall to switch power between the water pump or to run on municipal services.

#### Notes:

- The office trailer needs to be completely level in order for plumbing to function properly
- 400gal water tank, 400gal sewer tank and Hot Water Heater must be drained prior to moving the trailer

### Water System Operating Instructions

#### Fill 400 Gallon Water Tank

- Fill pipe is located outside the mechanical door with a sign indicating its use
- Remove the protective cover off 2" male camlock
- Connect 2" female camlock to fill pipe
- Ensure 2" water tank drain valve (#2) inside trailer mechanical room has been closed
- Pump water into water tank using a water pump and a 2" hose from the water supply
- Alternatively, a garden hose can be used by removing 400 gal water tank cover to fill the water tank
- Once water flows out of 3" overflow pipe at rear and top of the trailer the 400-gallon water tank is full
- Reconnect protective cover over water fill pipe

**Note:** While the water tank is filling, the water tank supply can be monitored by going into mechanical room and seeing water supply level thru sight glass on side of the water tank. There is a low-level float switch that activates when the water tank is empty and the alarm will sound and a red light will turn on. Turn OFF water alarm breaker at electrical panel to stop alarm until water is refilled. Turn breaker back on afterward refilling the water tank.

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## VALVE GUIDE FOR USING SELF CONTAINED WATER & SEWER TANKS

**NOTE:** BELOW IS VALVE INSTRUCTIONS FOR USING TOILET & WATER PUMP.

- VALVE 1. CLOSED (MAIN SEWER DRAIN)
- VALVE 2. CLOSED (WATER TANK DRAIN)
- VALVE 3. OPEN (WATER FEED FROM TANK)
- VALVE 4. OPEN (WATER FEED FROM PRESSURE TANK)
- VALVE 5. OPEN (PRESSURE TANK SHUT OFF)
- VALVE 6. CLOSED (PRESSURE TANK DRAIN)
- VALVE 7. CLOSED (TAP FOR MUNICIPAL)
- VALVE 8. CLOSED (SHUT OFF BETWEEN PUMP + MUNICIPAL)
- VALVE 9. CLOSED (SWITCH, WILL OPEN AUTOMATICALLY WHEN USING MUNICIPAL)
- VALVE 10. CLOSED (HWH DRAIN)
- VALVE 11. OPEN (COLD WATER FEED)
- VALVE 12. OPEN (HOT WATER FEED)
- VALVE 13. CLOSED (BYPASS FOR HOT WATER)
- VALVE 14. CLOSED (WINTERIZING)
- VALVE 15. CLOSED (WATER PUMP DRAIN)
- VALVE 16. CLOSED (SINK DRAIN)
- VALVE 17. CLOSED (SINK DRAIN)
- VALVE 18. CLOSED (KITCHEN SINK DRAIN) IF APPLICABLE
- VALVE 19. CLOSED (KITCHEN SINK DRAIN) IF APPLICABLE

RED BALL VALVE ON WHITE PVC DISCHARGE LINE COMING FROM TOILET PUMP NEEDS TO BE OPEN

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## Instructions to Pressurize Water Supply When Using Water Tank and Pumps:

See Valve Guide Instructions for Using Self-Contained Water and Septic Tanks (Page 2)

- OPEN water supply valve (#3) at bottom of the water tank to feed water pump. Please note that Pump may have to be primed. Ensure hot water heater drain valve (#6) is closed.
- Ensure water pump to be used is plugged in and the breaker in the electrical panel is in the ON position.
- Ensure the valve immediately upstream and downstream of the pump is OPEN. Ensure valve (#5) feeding hot water heater is CLOSED to pressurize the system.
- Lift low-pressure valve lever on top of the water pump until water pressures exceed 25Psi and water pump operates on its own. Then, Release low-pressure valve lever and pump should continue running until 55Psi pressure is obtained at which time pump will shut off.
- Once the water line is pressurized then open valve (#5) to fill hot water heater and pressurize hot water lines.

## VALVE GUIDE FOR USING MUNICIPAL WATER SERVICE

**NOTE:** If the water source is available then it can be connected to the trailer instead of using water tank. See Valve Guide below for using Municipal Service. On-site water supply is connected to a water pipe protruding down under the trailer near the water tank. Be sure to wrap on-site water supply pipe in heat tape to prevent freezing. There is a plug under the trailer to plug heat tape into. **The Power supply Box must be switched to Municipal for this system to Operate.** 

- VALVE 1. CLOSED (MAIN SEWER DRAIN)
- VALVE 2. CLOSED (WATER TANK DRAIN)
- VALVE 3. CLOSED (WATER FEED FROM TANK)
- VALVE 4. OPEN (WATER FEED FROM PRESSURE TANK)
- VALVE 5. OPEN (PRESSURE TANK SHUT OFF)
- VALVE 6. CLOSED (PRESSURE TANK DRAIN)
- VALVE 7. CLOSED (TAP FOR MUNICIPAL)
- VALVE 8. OPEN (SHUT OFF BETWEEN PUMP + MUNICIPAL)
- VALVE 9. OPEN (SWITCH, WILL OPEN AUTOMATICALLY WHEN USING MUNICIPAL)
- VALVE 10. CLOSED (HWH DRAIN)
- VALVE 11. OPEN (COLDWATER FEED)
- VALVE 12. OPEN (HOT WATER FEED)
- VALVE 13. CLOSED (BYPASS FOR HOT WATER)
- VALVE 14. CLOSED (WINTERIZING)
- VALVE 15. CLOSED (WATER PUMP DRAIN)
- VALVE 16. CLOSED (DRAIN)
- VALVE 17. CLOSED (DRAIN)
- VALVE 18. CLOSED (KITCHEN SINK DRAIN) IF APPLICABLE
- VALVE 19. CLOSED (KITCHEN SINK DRAIN) IF APPLICABLE

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## **Macerating Toilet Pump Operation**

The macerating toilet is equipped with a pump that will discharge waste into the sewer tank. Ensure the **RED** ball valve leading to sewage pit is open.

## 400 Gal Sewer Tank Operation

The 400 gal sewer tank is equipped with two floats. One high-level alarm float to let you know that the tank is almost full and needs to be drained. If not drained the second float will trip a contactor to turn the power off to the water pump when the tank reaches its capacity to prevent it from overflowing. To restore power to the water pump and stop alarm follow instructions to drain sewer tanks see below.

### Instructions for Draining the Sewer Tanks

- Located on the right side of the trailer near the center exterior door there is a 3" female camlock which is the drain pipe for the sewage tanks, which has a protective spill cover.
- Remove the protective spill cover and connect a 3" male camlock with a sewage hose from the vacuum truck to the 3" female camlock drain line on the trailer.
- Open sewage release valve (#1) to allow sewage to flow.
- Once sewage tank is empty close sewage valve (#1) and unhook the hose and reconnect protective cover into camlock connection.

If you are Draining into a municipal sewer line use adapter located inside the mechanical room. The adapter fastens to the camlock on the exterior of the unit. Once everything is connected open value 1. Failure to properly winterize unit can result in thousands of dollars in damage.

# **INSTRUCTIONS FOR DRAINING & WINTERIZING**

Note: All ball valves **NOT** charged with antifreeze need to be in the half-open position once winterizing is complete. If the valve is fully open or fully closed damage to the valve may occur and will need to be replaced.

To winterize you will need about 30 gallons of antifreeze.

Turn off the hot water heater electrical disconnect and drain the hot water heater (open valve #10) and CLOSE the valve feeding the hot water heater (Valve #12, 11) so no antifreeze will be pumped into the hot water heater.

OPEN the valve (#2) at the bottom of the 400-gallon water tank to drain it.

Close the valve feeding the toilet and then flush the toilet to get rid of the water in the bowl and tank.

There are about a 5 ft long x 1 ¼ " clear tube hose near the water pump (Valve #14) that is used to pump plumbers antifreeze thru the cold and hot water lines. Stick one end of this clear hose into a pail of antifreeze so that the water pump draws from this pail of antifreeze. Keep adding antifreeze to this pail as required. OPEN valve (#13) at the top of the hot water heater to crossfeed antifreeze from the cold water line to the hot water line downstream of the hot water heater.

With the hot and cold water lines charged with plumber antifreeze. Run the vanity sink and kitchen sink (if applicable) hot and cold water taps until antifreeze comes out and fill the sink p traps with antifreeze.

Open the valves of the toilets just enough to allow the antifreeze into the toilet tank. Flush toilet 4 to 5 times to ensure macerating pump and discharge line are clear of water. Pour antifreeze into the standpipe in the toilet tank. Sponge out or use a shop vac to clear any water out of the toilet bowl and tank then add 4" of plumber antifreeze in toilet bowls.

Have the 400 gal sewage tank drained as per instructions on page 4.